WO 2005/017124 PCT/US2004/026574

What is claimed is:

1. A compound according to Formula (1):

5

(1)

wherein:

10 Y represents -C(O) – or a covalent bond;

R represents a substituted arylene, a substituted heteroarylene or a covalent bond;

Z represents -CH<sub>2</sub>-, -NR3-, -O-, -C(O)NR3-, -NR3C(O)- or -CH=CH- when R is a substituted arylene or a substituted heteroarylene, and represents -CH<sub>2</sub>- or - CH=CH- when R is a covalent bond; R3 is hydrogen, C<sub>1-3</sub> substituted alkyl, and (CH<sub>2</sub>)<sub>0-2</sub> -C<sub>3-6</sub> substituted carbocycle;

R1 is selected from the group consisting of:

hydrogen,  $C_{1-3}$  substituted alkyl,  $C_{2-3}$  substituted alkenyl,  $C_{2-3}$  substituted alkynyl, and  $(CH_2)_{0-2}$ - $C_{3-6}$  substituted carbocycle;

m is equal to 0 when Z = -NR3- or  $-CH_2-$ ; or m is equal to 0 or 1 when  $Z = -O_-$ , -C(O)NR3- or -NR3C(O)-; or m is is an integer between 0 and 6 when Z = -CH=CH-;

n is an integer equal to or greater than 2, appropriately chosen so that the number of atoms in the macrocyclic ring ranges from 13 to 16;

or a salt, solvate, or physiologically functional derivative thereof.

25

15

20

- 2. A compound according to claim 1, wherein R1 represents hydrogen;
- 3. A compound according to claim 2, with the following absolute configuration:

WO 2005/017124 PCT/US2004/026574

or a salt, solvate or physiologically functional derivative thereof.

5

15

20

4. A compound according to claim 3 selected from the group consisting of:

N-{[(5R)-16-(Dimethylamino)-4-oxo-2,3,15,17,18-pentaazabicyclo[12.3.1]octadeca-1(18),14,16-trien-5-yl]methyl}-N-hydroxyformamide;

N-{[(5R)-16-(4-Morpholinyl)-4-oxo-2,3,15,17,18-pentaazabicyclo[12.3.1]octadeca-1(18),14,16-trien-5-yl]methyl}-N-hydroxyformamide;

N-{[(5R)-16-(Cyclopropylamino)-4-oxo-2,3,15,17,18-pentaazabicyclo[12.3.1]octadeca-1(18),14,16-trien-5-yl]methyl}-N-hydroxyformamide;

N-{[(5R)-16-(4-Morpholinyl)-4-oxo-2,3,17,18tetraazabicyclo[12.3.1]octadeca-1(18),14,16-trien-5-yl]methyl}-Nhydroxyformamide;

N-{[(5R)-16-Methyl-4-oxo-2,3,17,18-tetraazabicyclo[12.3.1]octadeca-1(18),14,16-trien-5-yl]methyl}-N-hydroxyformamide;

N-{[(5R)-4-Oxo-2,3,16,17-tetraazabicyclo[11.3.1]heptadeca-1(17),13,15-trien-5-yl]methyl}-N-hydroxyformamide;

 $N-\{[(5R)-15-Methyl-4-oxo-2,3,16,17-tetraazabicyclo[11.3.1]heptadeca-1(17),13,15-trien-5-yl]methyl\}-N-hydroxyformamide;$ 

N-{[(5R)-15-(4-Morpholinyl)-4-oxo-2,3,16,17tetraazabicyclo[11.3.1]heptadeca-1(17),13,15-trien-5-yl]methyl}-Nhydroxyformamide; WO 2005/017124 PCT/US2004/026574

5

10

15

20

N-{[(5R)-15-(2-Furanyl)-4-oxo-2,3,16,17-tetraazabicyclo[11.3.1]heptadeca-1(17),13,15-trien-5-yl]methyl}-N-hydroxyformamide;

- N-{[(5R)-15-(4-Morpholinyl)-4-oxo-2,3,14,16,17-pentaazabicyclo[11.3.1]heptadeca-1(17),13,15-trien-5-yl]methyl}-N-hydroxyformamide;
- N-{[(5R)-15-(Dimethylamino)-4-oxo-2,3,14,16,17-pentaazabicyclo[11.3.1]heptadeca-1(17),13,15-trien-5-yl]methyl}-N-hydroxyformamide;
- N-{[(5R)-4-Oxo-2,3,15,16-tetraazabicyclo[10.3.1]hexadeca-1(16),12,14-trien-5-yl]methyl}-N-hydroxyformamide;
- N-{[(5R)-14-Methyl-4-oxo-2,3,15,16-tetraazabicyclo[10.3.1]hexadeca-1(16),12,14-trien-5-yl]methyl}-N-hydroxyformamide;
- N-{[(5R)-14-(Dimethylamino)-4-oxo-2,3,15,16tetraazabicyclo[10.3.1]hexadeca-1(16),12,14-trien-5-yl]methyl}-Nhydroxyformamide;
- N-{[(5R)-14-(4-Morpholinyl)-4-oxo-2,3,15,16tetraazabicyclo[10.3.1]hexadeca-1(16),12,14-trien-5-yl]methyl}-Nhydroxyformamide; and
- N-{[(4R)-3,15-Dioxo-1,2-diazacyclopentadecan-4-yl]methyl}-N-hydroxyformamide.
- 5. A method of treating a bacterial infection by administering to a subject in need of treatment a compound according to claim 1.